

Application No. 10/018,319
Amendment

Page 4

REMARKS

Claims 21-29, 74, and 75 were pending in the application. Claims 21-29, 74, and 75 were rejected. Claims 21 and 22 are canceled without prejudice to or disclaimer of the subject matter recited therein. Claim 23 are amended. Claims 23-29, 74, and 75 are now pending in the application. Claim 21 is the independent claim. Reconsideration of the amended application is respectfully requested.

The examiner required a new declaration acknowledging the claimed priority applications. An application data sheet addressing the deficiency is submitted herewith.

The examiner objected to the abstract as being longer than 150 words. It is respectfully noted that the application was filed with a substitute specification on November 13, 2001. The substitute specification included an abstract consisting of only 128 words. Thus, the abstract currently complies with MPEP § 608.01(b). The objection, therefore, should be withdrawn.

The examiner rejected claims 21-23, 25-29, and 75 under 35 USC §102(e) as being anticipated by Lin et al.

Claim 23 is amended into independent form, including all of the limitations of base claim 21 and intervening claim 22. Thus, claim 23 has not been amended substantively, but only to recite explicitly those features that had previously been recited through dependence. Independent claim 23 recites a system for supplying a consumer with electrical power. The system includes a fuel cell device for generating electrical power, a fuel tank device for housing the fuel to be supplied to the fuel cell device, and a pump device provided on the consumer side, for supporting a fuel supply from the fuel tank device to the fuel cell device. The fuel cell device is provided on the consumer and

Application No. 10/018,319
Amendment

Page 5

the fuel tank device is a module that can be inserted into the consumer to supply power and removed from the consumer. The fuel is supplied essentially by the pump device.

In contrast, Lin et al. disclose a hydrogen canister fuel cell battery. The battery includes a base having at least one hydrogen distribution channel communicating with a hydrogen canister for passage of hydrogen to a fuel cell on the base. The examiner noted that the hydrogen canister is pressurized, and asserted that it functions as a pump device. It is respectfully submitted that this is not the case. Lin et al. do not actually disclose that the hydrogen canister is pressurized, nor do they suggest that pressurization could be advantageous. At column 3, lines 64-65 and column 5, lines 34-38, it is disclosed that hydrogen from a source can be poured in through the filler hole of an empty canister, at which time the hydrogen is absorbed by a hydrogen storing material. No pressurization of the contents is disclosed.

Even if the hydrogen canister were pressurized, a pump device, which is claimed as a unit separate from the fuel tank device, is very different from a pressurized canister provided as the fuel tank device itself. A pump device is known by those of skill in the art to be an apparatus or machine for raising, driving, exhausting, transferring, or compressing fluids as by the use of a controlled means such as a piston, plunger, or set of rotating vanes. Thus, a pump device can be controlled and regulated, and the fuel supply supported by the pump device is substantially uniform and not sensitive to changes in the pressure in the canister. It is respectfully submitted that substituting a pressurized canister for the canister disclosed by Lin et al. would not result in providing a pump, as recited in claim 23. As noted previously, providing such a pump or even a pressurized canister is not suggested by Lin et al., and would provide no disclosed advantage.

Application No. 10/018,319
Amendment

Page 6

Further, the pump device recited in claim 23 is provided on the consumer side and not within the fuel tank device (fuel canister), which is not possible for Lin et al. to provide if the canister itself is considered to also be the pump. Moreover, pressurized canisters are disadvantageous when compared to pumps with respect to security aspects, cost, weight, and other considerations. The present application claims a system that better handles a fluid fuel that is driven by a pump.

For at least the foregoing reasons, Lin et al. do not anticipate the invention recited in independent claim 23. Claims 25-29 and 75 depend from claim 23, and therefore also are not anticipated by Lin et al. The rejection of claims 23, 25-29, and 75, therefore, should be withdrawn.

The examiner rejected claims 21-27, 29, and 74 under 36 USC §102(e) as being anticipated by Kelley et al.

Claim 23 is amended into independent form, including all of the limitations of base claim 21 and intervening claim 22. Thus, claim 23 has not been amended substantively, but only to explicitly recite those features that had previously been recited through dependence. Independent claim 23 recites a system for supplying a consumer with electrical power. The system includes a fuel cell device for generating electrical power, a fuel tank device for housing the fuel to be supplied to the fuel cell device, and a pump device provided on the consumer side, for supporting a fuel supply from the fuel tank device to the fuel cell device. The fuel cell device is provided on the consumer and the fuel tank device is a module that can be inserted into the consumer to supply power and removed from the consumer. The fuel is supplied essentially by the pump device.

Application No. 10/018,319
Amendment

Page 7

In contrast, Kelley et al. disclose a portable fuel cell power supply. The power supply includes a fuel storage means for storing a supply of fuel, a fuel delivery means connected to the fuel storage means, and an energy conversion device connected to the fuel delivery means for converting the fuel to electricity.

The examiner stated that the Kelley et al. fuel cell is insertable into a consumer device. It is respectfully submitted that this is not the case; Kelley et al. do not disclose that the fuel tank device is a module that can be inserted into the consumer, as recited in claim 23. Rather, Kelley et al. disclose connecting means for electrically and mechanically interconnecting the power supply with an electrical device. See column 2, lines 38-41 and column 5, lines 20-24.

Further, the fuel delivery means 120 disclosed by Kelley et al. cannot fairly be regarded as a pump device because it doesn't embody the active principle of a pump device. As noted above, a pump device is known by those of skill in the art to be an apparatus or machine for raising, driving, exhausting, transferring, or compressing fluids as by the use of a controlled means such as a piston, plunger, or set of rotating vanes. Thus, a pump device can be controlled and regulated, and the fuel supply supported by the pump device is substantially uniform and not sensitive to changes in the pressure in the canister. In contrast, the fuel delivery means disclosed by Kelley et al. is merely a regulator, which is used to regulate the flow of gas and reduce the pressure. See column 3, lines 20-24. It is respectfully submitted that regulator is not a pump as recited in claim 23. Further, providing a pump in place of the regulator is not suggested by Kelley et al., and would provide no disclosed advantage.

Application No. 10/018,319
Amendment

Page 8

For at least the foregoing reasons, Kelley et al. do not anticipate the invention recited in independent claim 23. Claims 24-27, 29, and 74 depend from claim 23, and therefore also are not anticipated by Lin et al. The rejection of claims 23-27, 29, and 74, therefore, should be withdrawn.

Based on the foregoing, it is submitted that all objections and rejections have been overcome. It is therefore requested that the Amendment be entered, the claims allowed, and the case passed to issue.

Respectfully submitted,

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Date



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